Journal of Analytical Chemistry 1996 vol.51 N3, pages 252-257

Mathematical simulation of the formation of a mercury electrode surface

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Abstract

A general approach to the mathematical simulation of the formation of a mercury drop at the surface of a disk electrode was suggested. The main parameters of prepared hanging-drop mercury electrodes (radius, mass, and volume of a drop) can be calculated from the time of mercury deposition from solution that contains Hg2 2+ and measured under galvanostatic and potentiostatic conditions. A good agreement between theory and experimental data was illustrated by the example of forming stationary drop mercury ultramicroelectrodes. © 1996 MAEe Cyrillic signK Наука/Interperiodica Publishing.